IS 1041 (1988): Box Blanks for Jute Looms [TXD 14: Machinery for Fabric Manufacture]

BLANK PAGE

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(Reaffirmed 1998)

Indian Standard

SPECIFICATION FOR BOX BACK BLANKS FOR JUTE LOOMS

(First Revision)

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Indian Standard

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0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 9 March 1988, after the draft finalized by the Jute Mill Machinery/Accessories and Spare Parts Sectional Committee had been approved by the Textile Division Council.

0.2 This standard was originally published in 1957. In the present revision, the following major changes have been incorporated based on the experience gained since its publication in 1957:

a) Box back blanks made out of laminated compressed veneer boards have been included,

b) Dimensions have been left to the agreement between the buyer and the seller and tolerances for length, width and thickness have been specified, and

c) The requirement for freedom from defects has been modified.

0.3 Box back is a part of the shuttle box, made of wood and is fixed in a line with the reed. The shuttle carrying the weft, when propelled by the picking motion enters the shuttle box and is held in position with the help of swell fixed on the box back.

0.4 Useful information about code of practice for the manufacture of box back blanks, approved species of timber for its manufacture and short description of the approved species of timber are given in the following Appendices.

Appendix A	Code of practice for manufacture of box back blanks out of solid wood
Appendix B	List of approved species of timber for box back blanks made out of solid wood
Appendix C	List of approved species of timber for veneer for laminated compressed box back blank
Appendix D	Short description of species of timber for box back blank made out of solid wood

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Rules for rounding off numerical values (*revised*).

1. SCOPE

1.1 This specification prescribes the requirements of box back blanks for jute looms.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions of various types of timber defects as given in IS : 707-1976* shall be made applicable.

3. MATERIAL

3.1 The blanks shall be either sawn out of any one of the approved species of timber (*see* Appendix B) specified in an agreement between the buyer and the seller or from laminated compressed veneer board having veneer thickness between 0·9 and 2·0 mm and specific gravity between 1·05 and 1·25. The species of timber used for veneer shall be any one of the timbers prescribed in Appendix C.

*Glossary of terms applicable to timber technology and utilization (*second revision*).

4. REQUIREMENTS

4.1 Freedom from Defects

4.1.1 Box back blanks made out of solid wood shall be free from checks, splits, honey-combing, warp, twist, gum veins, bark pockets borer holes, etc, which are likely to affect the life and usefulness of the blanks.

4.1.2 Box back blanks made out of laminated compressed veneer boards shall be free from checks, splits, blisters, discolouration, gaps,

delamination, overlaps, etc, which are likely to affect the life and usefulness of blanks. Sapwood, if any in individual blank, shall not exceed 10 percent of its toatl volume provided the entire piece is brush coated with suitable preservative.

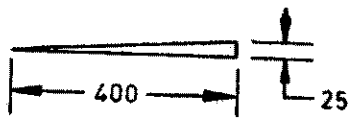
4.2 Freedom From Knots

4.2.1 Box back blanks made out of solid wood shall be free from knots other than tight knot up to 13 mm in diameter.

4.3 Slope of Grain

4.3.1 The timber used in the manufacture of blanks shall be straight grained. However, a slope of grain up to 1 in 16 shall be permitted.

4.3.2 The slope of grain shall be estimated by means of a template of the shape illustrated in Fig. 1 with the base line parallel to the lengthwise edge of the blanks. The blanks shall be considered to have satisfied the requirement of **4.2.1** if the grains do not cut both the base line and the hypotenuse of the template.



All dimensions in millimetres.

FIG. 1 TEMPLATE FOR MEASURING SLOPE OF GRAIN

4.4 Dimension

4.4.1 The length, width and thickness of blanks shall be as agreed to between the buyer and the seller. However, the following tolerances shall be made applicable.

a) Length : ± 3 mm
b) Width : ± 1·5 mm
c) Thickness : ± 1 mm

5. MARKING

5.1 Each blank shall be marked with the following:

a) Name of the article;
b) Manufacturer's name, initials or trade mark, if any;
c) Dimensions; and
d) Year of manufacture.

5.1.1 The blanks may also be marked with the Standard Mark.

NOTE — The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act 1986 and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to the manufacturers or producers may be obtained from the Bureau of Indian Standards.

6. SAMPLING

6.1 Unless otherwise agreed to between the buyer and the seller, to ascertain conformity of box back blanks for jute looms to the requirements of this specification, single sampling plan with Inspection Level I and Acceptance Quality Level (AQL) of 2·5 percent given in Tables 1 and 2 of IS : 2500 (Part 1) - 1973* shall be followed.

*Sampling inspection tables : Part 1 Inspection by attributes and by count of defects (*first revision*).

APPENDIX A
(*Clause* 0.4)

CODE OF PRACTICE FOR MANUFACTURE OF BOX BACK BLANKS OUT OF SOLID WOOD

A-1. PROCEDURE

A-1.1 Timber shall be converted into blanks of suitable size. They shall then be air-seasoned by keeping them under cover, or shall be kiln seasoned under proper conditions of drying to the required moisture content. The moisture content of well-seasoned blanks should not be more than 12 percent.

APPENDIX B
(*Clauses* 0.4 *and* 3.1)

LIST OF APPROVED SPECIES OF TIMBER FOR BOX BACK BLANKS MADE OUT OF SOLID WOOD

Trade Name	*Botanical Name*
Beech	(*Fagus* spp.)
Irul	(*Xylia Xylocarpa*)
Padauk	(*Pterocarpus dalbergiodes Rexb*)
Pyinkado	(*Xylia dolabriformis Benth*)
Rosewood	(*Dalbergia latifolia Roxb*)
Sissoc	(*Dalbergia sissoo Roxb*)

APPENDIX C
(*Clauses* 0.4 *and* 3.1)

LIST OF APPROVED SPECIES OF TIMBER FOR VENEER FOR LAMINATED COMPRESSED BOX BACK BLANK

Trade Name	*Botanical Name*
Mango	*Mangifera Indica*
Kadam	*Anthocephalus chinensis*
Birch	*Betula* (Spp.)
Gurjan	*Dipterocarpus* spp. (other than *D. macrocarpus*)
Makai	*Shorea Assamica*
Chikrasi	*Chukrasia velutiana*

APPENDIX D
(*Clause* 0.4)

SHORT DESCRIPTION OF SPECIES OF TIMBER FOR BOX BACK BLANK MADE OUT OF SOLID WOOD

D.1 A short description of species of timber for box back blank made out of solid wood is given below.

D-1.1 Beech — With a fine silky straight grain, close and even in texture, moderately hard and heavy, strong, easy to work and needs careful seasoning.

D-1.2 Irul — With irregularly interlocked grain, medium fine textured, hard and heavy, most difficult to season and to work.

D-1.3 Padauk — With broadly interlocked grain, medium fine textured, moderately heavy, very strong, durable and seasons well without difficulty, and easy to work but requires care.

D-1.4 Pyinkado — With straight, wavy or broadly interlocked grain, medium textured, very hard, strong and heavy, and difficult to season and to work but extremely durable.

D-1.5 Rosewood — With narrowly interlocked grains in long straight lines, medium coarse textured, moderately heavy to heavy, very hard and handsome wood, easy to work and machines beautifully to a smooth finish (unless excessive interlocked fibres are present), very durable, and seasons easily.

D-1.6 Sissoo — With interlocked grain in narrow straight lines, medium coarse textured, moderately heavy and a good deal harder than teak, extremely durable, and fairly easy to work and to season.